

Math 307 Week 5 Newsletter – Dr. Loveless

UPCOMING SCHEDULE:

Friday: Section 3.4: Repeated roots and reduction of order
Monday: Section 3.7: Free Vibrations (The beginning of our applications)
Wednesday: Section 3.5: Undetermined Coefficients
Next Friday: Section 3.5: Undetermined Coefficients

HOMEWORK: Closing this Friday (today!): HW 5 (3.1-3.4) Closing next Friday: HW 6 (3.7 and 3.5)

NEW POSTING:

Here, again, is the course website: <http://www.math.washington.edu/~aloveles/Math307Fall2019/index.html>
These are all original review sheets written by me.

1. **Detailed 3.3 (Complex Roots Characteristic Equation Problems) Review and Additional Worked Examples:**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Review3-3.pdf>
2. **Detailed 3.4 (Repeated Roots and Reduction of Order) Review and Additional Examples:**
<http://www.math.washington.edu/~aloveles/Math307SFall2019/m307Review3-4.pdf>
3. **Summary of 3.1, 3.3, and 3.4 (Solving Homogeneous Second Order Linear Equations) with practice problems:**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307ReviewLinearHomogeneous.pdf>
4. **Skills Review – Everything you need to know about solving 2-by-2 linear systems (read this carefully):**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Solving2x2Systems.pdf>
5. **Skills Review – Working with Sine and Cosine waves:**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Waves.pdf>
6. **Skills Review – Working with complex numbers:**
<https://sites.math.washington.edu/~aloveles/Math307Fall2019/m307ComplexNumbers.pdf>
7. **Intro for how to set up problems in 3.7 and 3.8: Mass-Spring Systems** (examples included): **(NEW next week)**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307ReviewCh3Applications.pdf>
8. **Full review of 3.7 (free vibrations), essential terminology and analysis: (NEW next week)**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Review3-7.pdf>
9. **Detailed 3.5 (Undetermined Coefficients) Review and six fully worked examples with solutions: (NEW next week)**
<http://www.math.washington.edu/~aloveles/Math307Fall2019/m307Review3-5.pdf>

OLD EXAMS: Here, again, is my personal Math 307 exam archive:

<http://www.math.washington.edu/~aloveles/Math307Fall2019/examarchive.html>

And here is some targeted practice on the current material.

Practice for 3.1, 3.3, and 3.4 (Solving Homogeneous Linear Second Order Equations):

Problem 5: <http://www.math.washington.edu/~aloveles/Math307Fall2019/midterm1e.pdf>

Problem 1: <http://www.math.washington.edu/~aloveles/Math307Fall2019/midterm2.pdf>

Problem 1(a): http://www.math.washington.edu/~aloveles/Math307Fall2019/wi_11_practice_sisodia.pdf

Problem 1(a): <http://www.math.washington.edu/~aloveles/Math307Fall2019/t2.pdf>

Problem 5: <http://www.math.washington.edu/~aloveles/Math307Fall2019/307Midterm2,Fall13.pdf>

Practice for 3.4 (Reduction of Order): (there is less emphasis on this in the homework now, but you should still know ideas in case I gave you an easier problem of this type):

Problem 6: <http://www.math.washington.edu/~aloveles/Math307Fall2019/midterm1e.pdf>

Problem 5: <http://www.math.washington.edu/~aloveles/Math307Fall2019/sp15m307e2.pdf>

Problem 3: <http://www.math.washington.edu/~aloveles/Math307Fall2019/midterm1a.pdf>

Problem 4: http://www.math.washington.edu/~aloveles/Math307Fall2019/wi_13_practice_caday2.pdf

I hope this helps!

- Dr. Andy Loveless